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Dissertation on apoplexy

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VII.

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on
Apoplexy
by
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Apoplexy.

This term is derived from the two Greek words απο and πλησσω, and signifies a blow or stroke.

This disease was regarded by the ancients as little short of the miraculous, and as the means by which the Gods occasionally removed those who were too wicked, or perhaps too good to remain longer on the earth. The researches of even the earlier anatomists tore aside this veil of superstition and exhibited the matter in its true light, as the legitimate effect of a natural cause.

The disease may make its attack in several different ways, the most common of which is that in which the remarkable feature is its suddenness. It may attack a person in any place or in any position.

While sleeping or pursuing his customary avocations, he is stricken down in an instant, and often without any appreciable warning or premonitory symptoms. The patient falls suddenly to the ground and lies unconscious to all external impressions. The face and especially the lips are swollen & livid; the pulse is full and generally slow; the bowels, torpid; the breathing, stertorous, and the muscles of the cheek, lips, & nostrils being loose and flaccid, these organs make, at each inspiration & expiration, a loud, flapping and blowing sound. At the same time a little frothy saliva is thrown out of the mouth, which might possibly lead the superficial observer to mistake this disease for Epilepsy. The eyes usually are closed and the pupils dilated, but this is not always the case, for sometimes the pupils are contracted almost to a point, which is considered by many a fatal symptom. The limbs usually hang loose and powerless, but occasionally one or

more of them are stiffened with slight convulsive twitches of the muscles. The whole appearance of the patient is very much like that of a person under the influence of an excessive quantity of intoxicating liquor, or of some of the narcotic poisons. This similitude is so great as to cause mistakes fatal to the patient, as well as to the reputation of the Physician. This comatose state may continue for a variable length of time, from a few minutes to many hours, and some authors give accounts of cases which terminated fatally favorably after the stupor and insensibility had continued for several days. When the attack is about to terminate fatally, the skin is covered with a cold, clammy sweat: the pulse is increased in rapidity: the ability to swallow is lost: the respiration is more labored and difficult, until the patient dies, the contractions of the heart continuing for some seconds after the breathing has entirely ceased.

on the other hand if proper assistance is indeed in season, the pulse become more natural, the respiration easier, the turgidity and lividity of the countenance decrease, the mental powers are gradually awakened out of their deep sleep and after a time the body and mind return to their former healthy condition. This complete recovery however is less frequent than could be desired, for paralysis, total or partial, is too often the sequel.

The mode of seizure next in frequency is that in which the first symptom is a severe pain in the head which continues to increase with repeated fainting fits and slight convulsions of one or more of the limbs, the mental faculties becoming by degrees more and more obtuse until profound coma comes on which is commonly of greater duration and much more dangerous than that of the first mentioned class.

Yet a third access of this disease, which

is sometimes seen, is total or partial hemiplegia which eventually leads to the same results as the before-mentioned symptoms but more slowly and at the same time less certainly. Although this class of cases is not so immediately or certainly fatal as the others, the proportion of those who recover their perfect health is thought to be less.

Apparently so sudden and usually so unexpected, it is comparatively seldom that one is attacked by apoplexy without some premonitory symptoms, though they may be so slight as to attract no attention. There are a sense of weight & fullness of the head; drowsiness, which will be felt perhaps for months preceding the stroke; throbbing head-ache; vertigo; imperfection or perversion of the senses of sight & hearing, with occasional numbness of the limbs & twitching of their muscles.

Though an acquaintance with these different forms of the approach of this disease is absolutely necessary in order to form a

correct diagnosis the treatment, after the comatose state has supervened, is essentially the same in all, they being referable to the same cause.

The causes of Apoplexy are divided into the propinate, the exciting & the predisposing.

The propinate cause, which is no less than the disease itself (of which the Coma is merely a symptom), is always pressure applied to the substance of the brain. This may be in different ways, of which the most common is that in which the pressure may be applied by the rupture of some one, or more of the small blood-vessels of the brain, allowing the blood to be effused into the Parenchyma of that organ. This has received the appellation of sanguineous Hemorrhage (apoplexy, or cerebral). It may take place in any part of the brain, but is more frequently observed in the hemispheres of the Cerebrum, and in, or near the corpora striata and thalami optici. The effused blood may find its way into the ventricles,

out is rarely poured out directly into them. When blood is extravasated externally to the membranes of the brain, it is almost invariably caused by some of the vessels being wounded by a projecting portion of carious bone.

All the arteries of the brain may become ossified to such a degree that the slightest blow or increase in the force of the circulation will cause a lesion of one or more of these vessels, and the smaller are more likely to be injured in this way than the larger. The blood when extravasated into the parenchyma of the brain, meeting with an equal degree of resistance in every direction, assumes a globular form and soon coagulates, forming a clot around which is formed a serous membrane which slowly absorbs the serous part of the blood, the cell becoming at the same time smaller and its contents firmer, until there is left nothing but a small cicatrix around which the brain often

becomes softer than natural. This softening is said by some to be as often the cause as the effect of cerebral hemorrhage. The amount of blood thus poured out is variable, from a few drops to an ounce or more, and, as the quantity is greater or smaller, the probability of recovery is increased or diminished. The situation of the effusion also makes a material difference in the chances of recovery, the smallest pressure on some parts of this delicate organ being accompanied by more marked effects, than more considerable violence on others. But this can make no particular difference in the treatment, as it is not known until after death when, or how great, is the pressure.

Serous Apoplexy is the same set of symptoms caused by the exhalation of serum from the membranes of the brain either within the ventricles, or externally between the brain and the skull. With this, as well as with the sanguineous class, there is frequently a fullness & tension of the vessels of the brain. In what is called

simple Apoplexy, this determination of blood to the encephalon is often the only visible cause, and not unfrequently this leaves no traces which can be discovered in a post-mortem examination. It is at present a disputed question whether this negative evidence proves that Apoplexy may exist without leaving its traces in the dead body, or want of sufficient care in the dissection. Sometimes traces of inflamation are found in the brain & its membranes, which is considered the cause of the serous effusion.

The exciting causes of Apoplexy are any thing which will increase the force of the central circulation in those predisposed to it. Such as full and hearty feeding, the use of a large quantity of spirituous liquors, violent exertion of the body, or the exciting passions of the mind. Positions which cause the blood to gravitate to the head are particularly dangerous to persons who have a predisposition to Apoplexy. It may be caused by exposure to the heat of the sun, by tight

bandages around the neck, or by the use of Narcotics. Very great cold will stupify one exposed to it, and cause symptoms resembling Apoplexy, and may occasionally be (the) exciting cause of this disease

The predisposing causes of Apoplexy may be the habitual recurrence of those which at length become the exciting causes, such as high-living, hard drinking &c. But the most effectual predisposing cause is old age combined with a full and plethoric habit, with a short neck and an inclination to corpulency. Indolence and too much sleep, though they may not cause, will certainly very materially assist this predisposition; so also will protracted distress of mind. A diseased state of the blood-vessels of the brain (generally ossification) and those thoracic diseases which impede the flow of blood through the lungs, will often be competent predisposing causes, as well as a cessation of the menses or any other habitual discharge.

Apoplexy has been considered by some as hereditary, and it may be so, inasmuch as the form of the body, and the temperament of the mind are so commonly found to be transmitted from the parent to the offspring.

Ischuria renalis will often prove both the predisposing, and exciting cause, the urea remaining in the blood acting as poison on the brain and causing fatal coma. It is stated that Apoplexy supervening on suppression of urine is always of the serous kind.

The consequences of a stroke of Apoplexy, when not immediately fatal, are too often such as leave the patient little to enjoy during the remainder of his days. Occasionally the mind and body may recover their former tone and vigor, but the predisposing causes still exist and in a state of greater activity than before, so that the mind of the patient will be continually harassed with fears lest each day bring with it another visitation of the disease. But in a

much larger proportion of cases, the consequences are paralytic affections of greater or less severity, which may extend to all the voluntary muscles of one side of the body, and is then called Hemiplegia. This is always situated on the side of the body opposite to that upon which the cerebral hemorrhage has taken place. The palsied limb is colder than natural, and, being less competent to withstand the extremes of heat & cold, mortification is easily excited; the muscles from want of use become atrophied, and the limb would be shrunken to much less than its natural size, were it not for the anasarca consequent upon the veins losing the pressure of the muscles upon them, and allowing the serous part of the blood to be exhaled through their coats. The patient has perfectly helpless, the digestion, the respiration, and other functions of organic life going on without disturbance, until by degrees the use of the palsied limbs is recovered, or, what is more frequently the sequel, the patient is worn out

and dies from exhaustion. When recovery takes place, the leg recovers sooner than the arm, and when the palsy is partial, the former is less liable to the disease than the latter.

Anaesthesia, or loss of sensation, is another of the effects of Apoplexy. The same rule, which applies to paralysis, is applicable to this, though in a less degree, viz. that it occurs on the side opposite to the Hemorrhage. This is less obstinate than Palsy, and sometimes accompanies it.

Mental derangement & imbecility may follow an Apoplectic attack. The memory in particular is likely to suffer, and any or all of the nobler traits of character, which have been possessed before, may be lost or debased. This is a consequence still more deplorable than any bodily ill, and recovery from it is very rare. When, as is often the case, the Hemiplegia is accompanied by mental derangement, the chances of recovery is small indeed.

While suffering under the attack, the patient should be placed in an horizontal

position with the head raised, and all tight clothing should be removed from the neck. When the pulse is full, strong, and regular, blood-letting will be found necessary. This, when practiced, should be done freely. When the head is hot, ice and other cold applications are serviceable. Purgatives are generally indicated.

In the atonic or asthenic form of Apoplexy, when the skin is pale and the pulse small, the object is to arouse the vital energies. For this purpose, nervine stimulants and external irritants should be employed. In short the treatment should be guided by the symptoms as they arise, and not by the name of the disease.

J. F. [illegible]